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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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C9/172,577 10/13/98 HALL

R BLANKET-358

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PM82/1121

EXAMINER

KIM, C

ART UNIT

PAPER NUMBER

3682

DATE MAILED:

11/21/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/172,577

Applicant(s)

Hall et al.

Examiner

Chong H. Kim

Group Art Unit

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☒ Responsive to communication(s) filed on Sep 21, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 16, 17, 19, 20, 39, 42, 43, 46, 47, 50-53, and 61-67 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☒ Claim(s) 64-67 is/are allowed.

☒ Claim(s) 16, 17, 19, 20, 39, 42, 43, 46, 47, 50-53, and 61 is/are rejected.

☒ Claim(s) 62 and 63 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☒ The proposed drawing correction, filed on Oct 10, 2000 is ☒ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 11

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Continued Prosecution Application

1. The request filed on Oct 10, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/172,577 is acceptable and a CPA has been established. An action on the CPA follows.
2. The Examiner acknowledges the Applicant's Amendment filed Sep 21, 2000 and Supplemental Amendment filed Oct 10, 2000 in response to the Office action made on Jun 1, 2000; and canceling of claims 54-60.

Specification

3. The amendment filed Feb 14, 2000 and Oct 10, 2000 are objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the "vented space" in claim 16, line 3 as amended in the amendment filed Feb 14, 2000; and "without the presence of said inert gas blanket, the engine oil would present properties of needing to be changed after a few thousand miles of use in said internal combustion engine" in claims 20, 51, and 52 as amended in the amendment filed Oct 10, 2000.

Applicant is required to cancel the new matter in the reply to this Office action.

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Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 16, 17, 19, 20, 39, 42, 43, 46, 47, and 51-53 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 16 recites the limitation, “vented space in a working machine” in line 3. The space in a working machine that is vented is neither disclosed nor suggested in the specification as originally filed. Furthermore, amended claims 20, 51, and 52 recite the limitation, “without the presence of said inert gas blanket, the engine oil would present properties of needing to be changed after a few thousand miles of use in said internal combustion engine”. Such limitation as described above is neither disclosed nor suggested in the specification as originally filed.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Kopel, U.S. Patent 4,561,393.

Kopel shows, in Figs. 1 and 2, and discloses in column 1 lines 21-31, column 2 lines 63-65, and column 5 lines 53-56, a method for controlling oxidative degradation of an oleaginous liquid substance (oil) 124 in a generally enclosed space 140 in a working machine (internal combustion engine, see column 1 lines 11-12), which comprises providing an inert gas (nitrogen, see column 4 lines 64-65) blanket to the space 140.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 16, 17, 39, and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elizabeth, U.S. Patent 3,617,580 in view of Fujiyama et al., JP Patent 02082304 A.

Elizabeth discloses, in the Abstract, and from column 2, line 50 to column 3, line 57, a method for controlling oxidative degradation of an oleaginous liquid substance in a generally enclosed working machine, which comprises providing the working machine having a space; providing the

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oleaginous liquid substance; and wherein the oleaginous is oil, and the working machine is an engine having a crankcase for holding a supply of lubricant and wherein the oil is present in the crankcase as the lubricant; but fails to provide an inert gas blanket to control oxidative degradation of the oil and the working machine being a transmission box or a gear box.

Fujiyama et al. teaches, in Fig. 1 and in the Abstract and Constitution, a method for providing inert gas blanket to control oxidative degradation of oil.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the solid form of oil oxidation treatment of Elizabeth with the method of providing inert gas of Fujiyama et al. in order to provide a longer lasting system that controls oxidative degradation so that the cost of maintenance can be reduced.

As to the matter of the working machine being a transmission box or a gear box, it would have been obvious to a person of ordinary skill in the art to provide the transmission box or gear box as a working machine wherein controlling oxidative degradation of oleaginous liquid substance is desired so that the machine's life can be prolonged.

10. Claims 19, 20, 42, 43, 51-53, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elizabeth in view of Fujiyama et al. as applied to claims 16, 17, 39, and 50 above, and further in view of Gast, Jr., U.S. Patent 5,649,995.

Elizabeth in view of Fujiyama et al. shows, as discussed above in the rejection of claims 16, 17, 39, and 50, a method of providing inert gas blanket into the enclosed space to control oxidation of the engine oil; and it is necessary to change the engine oil of the crankcase owing to the control

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of oxidative degradation of the engine oil, and the engine oil is changed only after at least twenty thousand miles of use in the crankcase of the internal combustion engine; but fails to show the membrane-containing device for separating the inert gas from air.

Gast, Jr. shows, in Figs. 3 and 4, a method for providing a membrane-containing device 12 to separate nitrogen from air through membrane 54.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply the membrane-containing device of Gast, Jr. to supply the inert gas of Elizabeth in view of Fujiyama et al. in order to provide higher purity nitrogen so that aging of a certain organic material can be better controlled.

11. Claims 46 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elizabeth in view of Fujiyama et al. and in view of Gast, Jr. as applied to claims 19 and 42 above, and further in view of Tremain et al., U.S. Patent 4,594,080.

Elizabeth in view of Fujiyama et al. and in view of Gast, Jr. shows, as discussed above in the rejection of claim 19, a method of providing nitrogen blanket into the enclosed space to control oxidation of the engine oil with the membrane-containing device for separation of nitrogen and oxygen from air, but fails to teach the oxygen being delivered for consumption to a passenger cabin space.

Tremain et al. teaches, in column 1, lines 11-23, a method of providing a gas separation system which produces oxygen from ambient air and delivered to a passenger cabin space for consumption.

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the inert gas delivery system of Elizabeth in view of Fujiyama et al. and in view of Gast, Jr. with the teaching of the oxygen delivery system for a passenger for consumption of Tremain et al. in order to provide more oxygen to the user so that fainting or death due to the lack of oxygen can be prevented.

Allowable Subject Matter

12. Claims 64-67 are allowed.
13. Claims 62 and 63 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

14. Applicant's arguments with respect to claims 19, 20, and 46 have been considered but are moot in view of the new ground(s) of rejection.
15. In response to the applicant's argument that the "overpressure" disclosed in the specification contemplates a "vent", it is noted that the disclosure of "overpressure" disclosed on page 9, line 15 does not contemplate a "vent". The context in which the word "overpressure" is used states that "the invention may apply to any system in which a substantially enclosed space or a space to which an overpressure can be applied contains an oxidizable material." The above statement does not infer

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or suggest that there is a "vent" provided in order to reduce the overpressure. It simply states that the space can be applied with overpressure.

16. In response to the applicant's argument that Kopel does not describe the claimed invention in claim 16, it is the Examiner's contention that Kopel does describe the claimed invention as set forth in claim 16. Claim 16 recites the limitations concerning a working machine. Certainly, Kopel's sealed hydraulic lifter system is a working machine. Furthermore, the applicant argues that claim 16 requires a vented system. As set forth above in paragraph 4, "vented space" is new matter because the space in a working machine that is vented is neither disclosed nor suggested in the specification as originally filed.

17. In response to the applicant's argument that the combination of Elizabeth et al. and Fujiyama et al. does not teach nor suggest any of the claimed embodiments, it is the Examiner's position that the combination does suggest such claimed embodiments. Elizabeth et al. discloses, in the Abstract, and from column 2, line 50 to column 3, line 57, a method for controlling oxidative degradation of an oleaginous liquid substance in the working machine such as the engine, but fails to show an inert gas blanket being provided in the working machine to control oxidative degradation of the oil. However, Fujiyama et al. teaches a method of providing inert gas blanket to control oxidative degradation of oil as described in the Abstract and Constitution. Therefore, it would have been obvious to a person of ordinary skill in the art to modify the oxidation treatment of Elizabeth et al. with the inert gas blanket method of Fujiyama et al. in order to provide a longer lasting system that controls oxidative degradation so that the cost of maintenance can be reduced.

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18. In response to the applicant's argument that Fujiyama et al. and Gast, Jr. are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Fujiyama et al. and Gast, Jr. are reasonably pertinent to the particular problem, that is keeping elements from oxidizing, with which the applicant was concerned.


19. In response to the applicant's argument that Tremain et al. is not properly applicable because it relates to delivery of Oxygen and not nitrogen, it is noted that the intent of utilizing Tremain et al. is to show the obviousness of providing oxygen to the passenger cabin space to make sure that the operator or passengers are kept from fainting or death when operating a machine. Elizabeth et al. in view of Fujiyama et al. and in view of Gast, Jr. teaches all the limitations, including the provision of nitrogen gas as recited in claims 16, 19, and 42, except the limitation that deals with providing oxygen to a passenger cabin space. Thus Tremain et al. provides such remedy by teaching that one of ordinary skill in the art may utilize the separated oxygen to be given to the passengers in a passenger cabin space.

20. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention

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was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chong H. Kim whose telephone number is (703) 305-0922.


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CHK 

November 20, 2000